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EXAMINER	
CHEN, TSE W	

ART UNIT	PAPER NUMBER
2116	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/780,930	CHEN ET AL.	
	Examiner	Art Unit	
	TSE CHEN	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7,13,14,16 and 17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7,13,14,16 and 17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-2, 5, 7, 13, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa et al., US Publication 20010014952, hereinafter Furukawa, in view of Jue, US Patent 6567931.

3. In re claim 1, Furukawa discloses a method for reducing the possibility of cold reset in a computer system [100] that includes a central processing unit (CPU) [139], a wake-up button [3] that is used to awaken [resume] the CPU from a sleep mode [suspend], and a battery [113] that supplies power to the computer system, and the method comprising:

- When the CPU is in the sleep mode and the period during which the wake-up button is pressed is less than a predetermined value [e.g., 4 seconds], the CPU continues to stay in the sleep mode, wherein the predetermined value is greater than the general value of the period during which the wake-up button is pressed due to a collision, an impact, or falling to the ground [falling to the ground, just like a collision or an impact, would be almost instantaneous and certainly less than 4 secs], and less then the general value of the period during which the user intentionally presses the wake-up button [e.g., 5 secs] such that the computer system can be prevented damage by the collision, the impact, or falling to the ground [0019].

4. Furukawa did not disclose the CPU staying in the sleep mode even a wake-up event occurs when the CPU is in the sleep mode and the computer system's power supply is in an uncertain status.

5. Jue discloses a method in a computer system [130] that includes a CPU [200] supporting the function of software power [analogous to battery of Furukawa] fault handling [col.3, ll.47-61; bios executed on processor], the method comprising when the CPU is in the sleep mode [soft off] and the computer system's power supply is in an uncertain status, the CPU staying in the sleep mode even a wake-up event occurs [col.3, ll.47-61; col.5, l.60 col.6, l.1].

6. It would have been obvious to one of ordinary skill in the art, having the teachings of Furukawa and Jue before him at the time the invention was made, to modify the method taught by Furukawa to include the teachings of Jue, in order to obtain the method that can handle power supply issues. One of ordinary skill in the art would have been motivated to make such a combination as it provides a way to better security and recovery operations [Jue: col.2, l.55 col.3, l.23].

7. In re claim 13, Furukawa and Jue disclose each and every limitation of the claim, as discussed above in reference to claim 1. Furukawa further discloses a computer system [100] comprising a delay protection circuit [2] that is used to detect the status of the wake-up button [0008].

8. As to claim 2, Jue discloses, wherein the uncertain power supply status is the status of battery fault [col.5, ll.50-59; power loss analogous to battery loss of Furukawa].

9. As to claims 5 and 16, Furukawa discloses, wherein the computer system is a personal digital assistant (PDA) [0038].

10. As to claims 7 and 17, Furukawa discloses, wherein the predetermined value is greater than 1~2 millisecond [e.g., 4 secs]. Furukawa did not disclose explicitly that the predetermined value is less than 100 milliseconds. One with ordinary skill in the art, upon reading Furukawa would have recognized the desirability of finding an optimal predetermined value to suit user's preference [e.g, user desires faster response]. Since Furukawa already discloses a finite range [i.e., up to 4 secs] for the predetermined value, it would have been obvious to one of ordinary skill in the art to try different predetermined values [e.g., predetermined value less than 100 milliseconds] within the range, as one with ordinary skill in the art has good reason to pursue the known options within his or her technical grasp with predictable result.

11. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa and Jue as applied to claim 1 above, and further in view of Kimura, US Patent 5375246.

12. Furukawa and Jue disclose each and every limitation of the claim, as discussed above in reference to claim 1. Furukawa further discloses a computer system [100] comprising:

- A CPU [131] that is used to control the computer system.
- A circuit unit [2] that is electrically connected to the CPU, and is used to receive a wake-up event and to selectively output the wake-up event to the CPU [0008].
- A detection circuit [4] that is used to control the circuit unit according to the status of the computer system [0008].

13. Furukawa did not disclose a status of uncertain power supply which includes the status when the battery lid is opened.

14. Kimura discloses a method wherein the uncertain power supply status is the status when the battery lid is opened [col.5, l.66 – col.6, l.54; opening lid produces H level indicating battery replacement may be implemented].

15. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa and Jue as applied to claim 1 above, and further in view of Sakai, US Patent 6266776.

16. Furukawa and Jue disclose each and every limitation of the claim as discussed above. Furukawa and Jue did not disclose explicitly the uncertain power supply status is the status when the battery is in low power.

17. Sakai discloses a method comprising when the CPU [11] that supports the function of software battery fault handling [via acpi os] is in the sleep mode and the computer system's power supply is in an uncertain status [e.g, low battery], the CPU staying in the sleep mode [s4], wherein the uncertain power supply status is the status when the battery is in low power [fig.5; col.1, ll.13-19; col.4, ll.25-27].

18. It would have been obvious to one of ordinary skill in the art, having the teachings of Sakai, Furukawa and Jue before him at the time the invention was made, to modify the method taught by Furukawa and Jue to include the teachings of Sakai, in order to obtain the method that includes low battery conditions. One of ordinary skill in the art would have been motivated to make such a combination as it provides a way to optimize power conservation related to sleep states [Sakai: col.1, l.65 – col.2, l.12].

19. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa and Jue as applied to claim 13 above, and further in view of Kiani, US Patent 7034585.

20. Furukawa and Jue disclose each and every limitation of the claim as discussed above. Furukawa further discloses, wherein when the computer system is in the sleep mode, the delay protection circuit is enabled [0008, 0019; enabled to maintain state]. Furukawa and Jue did not disclose when the computer system is in normal operation mode, the delay protection circuit is disabled.

21. Kiani discloses a computer system wherein when the computer system is in normal operation mode, the delay protection circuit [interface analogous to delay protection circuit] is disabled [col.1, ll.54-62].

22. It would have been obvious to one of ordinary skill in the art, having the teachings of Kiani, Furukawa and Jue before him at the time the invention was made, to modify the delay protection circuit taught by Furukawa and Jue to include the teachings of Kiani, in order to obtain the claimed computer system. One of ordinary skill in the art would have been motivated to make such a combination as it provides a way to avoid additional power consumption during normal operation [Kiani: col.1, l.66 – col.2, l.12].

Response to Arguments

23. Applicant's arguments filed October 4, 2007 have been fully considered but they are not persuasive.

24. Applicant argues that Furukawa "… cannot prevent damage caused by collision, impact, or falling to the ground" by pointing to paragraph [***20***] of Furukawa. Examiner submits that the rejection was based on paragraph [***19***], which clearly discloses that when the CPU is in the sleep [suspend] mode and the period during with the wake-up button [3] is pressed is less than a predetermined value [e.g., 4 secs], the CPU continues to stay in the sleep mode. Furthermore,

since the period of time during a collision, an impact, or falling to the ground is almost instantaneous, the period of time would certainly be expected to be less than 4 seconds. Thus, when the wake-up button is accidentally pressed due to a collision, an impact, or falling to the ground, the CPU will not wake up and damage can be prevented.

25. Applicant argues that in claim 1, "the wake up button is used for waking up the computer from the sleeping state to the normal operation states when the period during which the wake-up button is pressed for a time period that is equal or larger than a predetermined value". Examiner disagrees and submits that claim 1 does not link waking up the computer to such particular period.

26. Applicant argues that claim 1 "recites a method that includes changing the computer system between the sleep mode and the normal operation state… in contrast, paragraphs [12]-[14] of Furukawa…" Examiner submits that claim 1 does not detail the changing step and that Furukawa, as Applicant admits, discloses "changing the electronic apparatus between the SUSPEND state, the normal operation state..."

27. Applicant admits that Jue discloses "a power management for computer system to preventing the false remote system wake events… bypasses the wakeup routine..." which correlates with claim 1.

28. Applicant argues that Jue "fails to disclose or suggest the features recited in amended independent claim 1…" Examiner submits that claim 1 was rejected based on a combination of Furukawa and Jue [i.e., amended features were rejected in view of Furukawa]. Thus, Furukawa and Jue combined disclose each and every limitation of claim 1.

29. All other claims were not argued separately in terms of alleged undisclosed limitations.

30. Applicant argues that the Office Action did not "… ascertain the differences in between the prior art and the claim in issue… resolve the level of ordinary skill in the art…" without any particular detail or support. Examiner disagrees with the mere allegation and submits the following. The rejections clearly ascertains the differences by interpreting the claim language [i.e., mapping to reference] and considering the claimed invention and the prior art as a whole [not just as a "gist"]. The level of ordinary skill in the art need not be explicit stated, as it may be implicit in view of the prior art applied. To beneficially practice the power management process of Furukawa and Jue, one of ordinary skill in the art would know the ACPI standard that includes various power/sleep modes applicable in addressing issues of power conservation.

31. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Examiner submits the rejections did not include knowledge gleaned only from the applicant's disclosure.

32. Applicant argued that "… the rationales relied on by the Examiner are each result-driven…" Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In this case, the teaching,

suggestion, or motivation to combine the references was explicitly cited from the references themselves. Examiner submits that these motivational "ultimate results" [e.g, battery replacement without destroying data, optimize power conservation related to sleep states...] would motivate one with ordinary skill in the art to incorporate the associated teachings.

33. Applicant argues that "there is no apparent disadvantage present in a particular prior art reference… no motivation to combine…" without any support. Examiner was not able to find any evidence that indicates the cited references to be perfect inventions without any disadvantages that cannot be improved upon.

34. Applicant argues that the "rationales relied on by the Office Action in the present application are merely generic statements… nothing to do specifically with the structures…" Examiner submits that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Clearly, the "generic motivations" found in the references themselves would have suggested the combination of these references.

35. As such, Applicant's arguments are deemed not persuasive and the rejections are respectfully maintained.

Conclusion

36. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TSE CHEN whose telephone number is (571)272-3672. The examiner can normally be reached on Monday - Friday 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on (571) 272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tse Chen
February 19, 2008

/Tse Chen/
Primary Examiner, Art Unit 2116